III. AMENDMENT TO THE CLAIMS

The listing of claims replaces all prior versions, and listings, of claims of the application.

1.-12. (Cancelled)

13. (Currently amended) A method of fabricating a capacitor, the method comprising the steps of:

~~conducting a rapid thermal nitridation in ammonia (NH_3) to generate~~ generating a first layer of silicon nitride upon a silicon substrate;

depositing a layer including an aluminum oxide;

cleaning the layer including aluminum oxide in situ;

applying an ultra-high vacuum;

chemical vapor depositing (CVD) silicon nitride in the ultra-high vacuum to generate a second layer of silicon nitride; and

generating an electrode layer upon the second layer.

14. (Original) The method of claim 13, further comprising the step of cleaning the silicon substrate in hydrofluoric acid (HF) prior to generating the first layer.

15. (Cancelled)

16. (Currently Amended) The method of claim ~~15~~ 13, wherein the layer including aluminum oxide has a surface temperature of no less than approximately 600°C and no greater than approximately 900°C during the step of generating the second layer.

17. (Original) The method of claim 13, wherein the ultra-high vacuum is at no less than approximately 10^{-11} Torr and no greater than approximately 10^{-8} Torr when idle and no less than approximately 10^{-9} Torr and no greater than approximately 10^{-2} Torr during silicon nitride deposition.

18. (Original) The method of claim 13, wherein the step of CVD uses silane (SiH_4) and ammonia (NH_3) as silicon (Si) and nitrogen (N) precursors.

19. (Original) The method of claim 13, further comprising the step of conducting a thermal anneal.

20. (Cancelled).

21. (New) The method of claim 13, wherein the first layer is no less than approximately 5Å and no greater than approximately 15Å.

22. (New) The method of claim 13, wherein the layer including aluminum oxide is no less than approximately 15Å thick and no greater than approximately 50Å thick.

23. (New) The method of claim 13, wherein the second layer is no less than approximately 3Å thick and no greater than approximately 8Å thick.

24. (New) The method of claim 13, wherein the step of generating the first layer includes conducting a rapid thermal nitridation in ammonia (NH_3).